

IN THE CLAIMS

For the convenience of the Examiner, all pending claims of the Application are reproduced below.

1. (Canceled)

2. (Previously Presented) The accelerated weight drop of Claim 40 wherein the driver further comprises a compressed gas spring, wherein the compressed gas spring includes a gas chamber and a piston, wherein the piston is configured to slide within the gas chamber to compress a gas therein to create a pressure that drives the striker toward the surface.

3. (Previously Presented) The accelerated weight drop of Claim 2 further comprising a charging port coupled to the gas chamber, the charging port configured to provide the gas within the gas chamber.

4. (Currently Amended) The accelerated weight drop of ~~Claim 2 wherein a push rod connects the piston to the striker. Claim 40, wherein each of the impact isolators is positioned substantially in line with a line of impact of the striker.~~

5. (Canceled)

6. (Canceled)

7. (Previously Presented) The accelerated weight drop of Claim 40 further including a catch mechanism coupled to the housing and configured to hold the striker in a cocked position.

8. (Canceled)

9. (Previously Presented) The accelerated weight drop of Claim 40 wherein the housing is coupled to a static load and is configured to transfer the static load to the strike plate.

10. (Previously Presented) The accelerated weight drop of Claim 9 further comprising a hydraulic press coupled to the housing, the hydraulic press configured to create the static load.

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Previously Presented) The accelerated weight drop of Claim 40 further comprising a hydraulic lift coupled to the striker, the hydraulic lift configured to lift the striker to a cocked position.

15. (Canceled)

16. (Canceled)

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38. (Canceled)

39. (Canceled)

40. (Currently Amended) An accelerated weight drop, comprising:
a striker positionable over a surface;
a housing at least partially surrounding the striker;
a driver operatively coupled to the striker and operable to drive the striker
toward the surface; and

a plurality of impact isolators, at least two of the impact isolators positioned substantially in line with a line of impact of the striker; wherein the impact isolators are an impact isolator operable to allow the housing to move relative to the surface upon an impact of the striker with the surface.

41. (Previously Presented) The accelerated weight drop of Claim 40, wherein the surface comprises a strike plate.

42. (Previously Presented) The accelerated weight drop of Claim 41, wherein the surface further comprises an anvil disposed between the strike plate and the striker.

43. (Previously Presented) The accelerated weight drop of Claim 40, wherein the impact isolator comprises a member having a slot positioned substantially in line with a line of impact of the striker, and wherein the surface comprises a pin operable to be slidably coupled within the slot.

44. (Previously Presented) The accelerated weight drop of Claim 43, wherein the surface further comprises an anvil disposed between a strike plate and the striker, and wherein the pin is rigidly coupled to the anvil.

45. (Currently Amended) A method of manufacturing an accelerated weight drop, comprising:

coupling a driver, operable to be driven toward a surface, to a housing, wherein the housing at least partially surrounds the driver;

rigidly coupling a plurality of impact isolators ~~an impact isolator~~ to the housing, at least two of the impact isolators positioned substantially in line with a line of impact of the striker;

slidably coupling the impact isolator to the surface, wherein the impact isolator is operable to allow the housing to move relative to the surface upon an impact of the striker with the surface.

46. (Previously Presented) The method of Claim 45, wherein the surface comprises a strike plate.

47. (Previously Presented) The method of Claim 46, wherein the surface further comprises an anvil disposed between the strike plate and the striker.

48. (Previously Presented) The method of Claim 45, wherein the impact isolator comprises a member having a slot and wherein the surface comprises a pin, and wherein slidably coupling the impact isolator to the surface comprises positioning the pin within the slot substantially in line with a line of impact of the striker.

49. (Previously Presented) The method of Claim 48, wherein the surface further comprises an anvil disposed between a strike plate and the striker and the pin is rigidly coupled to the anvil, and wherein slidably coupling the impact isolator to the surface comprises positioning the pin within the slot substantially in line with a line of impact of the striker.

50. (Previously Presented) The method of Claim 45, wherein the driver further comprises a compressed gas spring, and wherein the compressed gas spring includes a gas chamber and a piston.

51. (Previously Presented) The method of Claim 50, wherein the accelerated weight drop further comprises a charging port coupled to the gas chamber, the charging port configured to provide the gas within the gas chamber.

52. (Currently Amended) The method of ~~Claim 50, wherein a push rod couples the piston to the striker. Claim 45, wherein each of the impact isolators is positioned substantially in line with a line of impact of the striker.~~

53. (Previously Presented) The method of Claim 45, wherein the accelerated weight drop further comprises a catch mechanism coupled to the housing and configured to hold the striker in a cocked position.

54. (Previously Presented) The method of Claim 45, wherein the housing is coupled to a static load and is configured to transfer the static load to the strike plate.

55. (Previously Presented) The method of Claim 54, wherein the accelerated weight drop further comprises a hydraulic press coupled to the housing, the hydraulic press configured to create the static load.

56. (Previously Presented) The method of Claim 45, wherein the accelerated weight drop further comprises a hydraulic lift coupled to the striker, the hydraulic lift configured to lift the striker to a cocked position.

57. (Canceled)

58. (Currently Amended) A seismic survey system, comprising:
a striker positionable over a surface;
a housing at least partially surrounding the striker;
a driver operatively coupled to the striker and operable to drive the striker toward the surface;

a plurality of impact isolators ~~an impact isolator~~ operable to allow the housing to move relative to the surface upon an impact of the striker with the surface,
wherein at least two of the plurality of impact isolators comprises a slot positioned substantially in line with a line of impact of the striker;

one or more geophones placed proximate the surface, the one or more geophones configured to collect information from seismic waves created upon an impact of the striker with the surface; and

a seismic recorder connected to the one or more geophones, the seismic recorder configured to record the information collected.

59. (Previously Presented) The system of Claim 58, wherein the surface comprises a strike plate.

60. (Previously Presented) The system of Claim 59, wherein the surface further comprises an anvil disposed between the strike plate and the striker.

61. (Previously Presented) The system of Claim 58, wherein the impact isolator comprises a member having a slot positioned substantially in line with a line of impact of the striker, and wherein the surface comprises a pin operable to be slidably coupled within the slot.

62. (Previously Presented) The system of Claim 61, wherein the surface further comprises an anvil disposed between a strike plate and the striker, and wherein the pin is rigidly coupled to the anvil.

63. (Previously Presented) The system of Claim 58, wherein the driver further comprises a compressed gas spring, wherein the compressed gas spring includes a gas chamber and a piston.

64. (Previously Presented) The system of Claim 63, wherein the accelerated weight drop further comprises a charging port coupled to the gas chamber, the charging port configured to provide the gas within the gas chamber.

65. (Currently Amended) The system of ~~Claim 63, wherein a push rod connects the piston to the striker. Claim 58, wherein each of the impact isolators is positioned substantially in line with a line of impact of the striker.~~

66. (Previously Presented) The system of Claim 58, wherein the accelerated weight drop further comprises a catch mechanism coupled to the housing and configured to hold the striker in a cocked position.

67. (Previously Presented) The system of Claim 58, wherein the housing is coupled to a static load and is configured to transfer the static load to the strike plate.

68. (Previously Presented) The system of Claim 67, wherein the accelerated weight drop further comprises a hydraulic press coupled to the housing, the hydraulic press configured to create the static load.

69. (Previously Presented) The system of Claim 58, wherein the accelerated weight drop further comprises a hydraulic lift coupled to the striker, the hydraulic lift configured to lift the striker to a cocked position.

70. (Canceled)

71. (Canceled)

72. (Canceled)

73. (Canceled)

74. (New) An accelerated weight drop, comprising:

a striker positionable over a surface;

a housing at least partially surrounding the striker;

an impact isolator operable to allow the housing to move relative to the surface upon an impact of the striker with the surface, wherein the impact isolator comprises a member having a slot, and wherein the surface comprises a pin operable to be slidably coupled within the slot; and

a driver operatively coupled to the striker and operable to drive the striker toward the surface, wherein the surface comprises a strike plate and an anvil disposed between the strike plate and the striker, and wherein the pin is rigidly coupled to the anvil.

75. (New) The accelerated weight drop of Claim 74, wherein the slot is positioned substantially in line with a line of impact of the striker.

76. (New) A method of manufacturing an accelerated weight drop, comprising:
coupling a driver, operable to be driven toward a surface, to a housing,
wherein the housing at least partially surrounds the driver;
rigidly coupling an impact isolator to the housing, wherein the impact isolator
comprises a member having a slot, and wherein the surface comprises a pin operable to be
slidably coupled within the slot; and
slidably coupling the impact isolator to the surface, wherein the impact
isolator is operable to allow the housing to move relative to the surface upon an impact of the
striker with the surface, and wherein the surface comprises a strike plate and an anvil
disposed between the strike plate and the striker, and wherein the pin is rigidly coupled to the
anvil.

77. (New) The method of Claim 76, wherein the slot is positioned substantially in
line with a line of impact of the striker.

78. (New) A seismic survey system, comprising:

a striker positionable over a surface;

a housing at least partially surrounding the striker;

an impact isolator operable to allow the housing to move relative to the surface upon an impact of the striker with the surface, wherein the impact isolator comprises a member having a slot, and wherein the surface comprises a pin operable to be slidably coupled within the slot;

a driver operatively coupled to the striker and operable to drive the striker toward the surface, wherein the surface comprises a strike plate and an anvil disposed between the strike plate and the striker, and wherein the pin is rigidly coupled to the anvil;

one or more geophones placed proximate the surface, the one or more geophones configured to collect information from seismic waves created upon an impact of the striker with the surface; and

a seismic recorder connected to the one or more geophones, the seismic recorder configured to record the information collected.

79. (New) The system of Claim 78, wherein the slot is positioned substantially in line with a line of impact of the striker.